THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A method of lining an underground conduit while the conduit is in service carrying a liquid, the method comprising the steps of:

positioning a pipe winding apparatus within an access pit adjoining the conduit to be relined, the pipe winding apparatus having an annular cage through which the liquid flows;

feeding the pipe winding apparatus an elongate plastic or plastic composite strip down into the pit, the strip having parallel spaced apart first and second edges;

driving the strip downwards into the annular cage so as to present an incoming first edge to an adjacent second edge of a wound convolution of the strip;

preventing liquid that has adhered to and ascended with the second edge from descending down towards the incoming first edge;

applying a molten bead of plastic to at least one of the incoming first edge and the adjacent second edge of the newly wound pipe; and

compressing the bead between the incoming first edge and the adjacent second edge,

thereby forming an elongate continuously welded pipe in situ.

2. A method as claimed in claim 1 further comprising a step of:

heating at least one of the incoming first edge and the adjacent second edge of the newly wound pipe,

whereby the heating step improves adhesion of the bead to at least one of the incoming first and adjacent second edges.

3. A method as claimed in claim 2 wherein the heating step comprises:

directing hot gas towards the incoming first edge, the gas

heating the first edge; and

directing hot gas towards the adjacent second edge, the gas heating the second edge.

4. A method as claimed in claim 1 wherein the preventing step comprises directing gas towards the second edge at a circumferential position on the second edge, the circumferential position being on an arc between the liquid being carried by the conduit and a point at or near the zenith of the second edge.

5. A method as claimed in claim 4 wherein the gas directed towards the second edge is directed in a direction substantially opposite of the direction of travel of the second edge.

6. A method as claimed in claim 1 wherein the preventing step comprises wiping the second edge at a circumferential position on the second edge, the circumferential position being on an arc between the liquid being carried by the conduit and a point at or near the zenith of the second edge.

7. A method as claimed in claim 6 wherein the wiping comprises brushing with a counter rotating brush.

8. A method as claimed in claim 1 wherein the preventing step comprises inducing a partial vacuum at a circumferential position on the second edge, the circumferential position being on an arc between the liquid being carried by the conduit and a point at or near the zenith of the second edge.

9. A method of lining an underground conduit while the conduit is in service carrying a liquid, the method comprising the steps of:

positioning a pipe winding apparatus within an access pit adjoining the conduit to be relined, the pipe winding apparatus having an annular cage through which the liquid flows;

feeding the pipe winding apparatus an elongate plastic or plastic composite strip down into the pit, the strip having parallel spaced apart first and second edges;

winding the strip into the annular cage so as to form adjacent convolutions;

directing a jet of hot gas towards an area spanning adjacent convolutions of the strip thereby creating a void within the liquid; and

welding adjacent convolutions of the strip together within the gas void,

thereby forming an elongate continuously welded pipe in situ.

10. An apparatus for lining an underground conduit, the apparatus comprising:

an annular frame in use having a crown portion and a base portion;

a strip guide disposed around and supported by the annular frame, the guide arranged to guide a strip around a helical path when the machine is in use, the path having a zenith;

a drive assembly mounted to the frame for driving the strip downwards into the helical path in a winding direction so as to present an incoming first edge to an adjacent second edge of a wound convolution of the strip;

a liquid remover mounted to the frame, the liquid remover arranged to prevent liquid that has adhered to and ascended with the

second edge from descending down towards the incoming first edge; and

an extruder mounted to the frame, the extruder having a nozzle in use extruding a molten bead of plastic onto the strip at a position just before said overlap.

11. An apparatus as claimed in claim 10 further comprising:

a pair of strip pinch rollers mounted to the frame at a position circumferentially about halfway between the crown portion and the base portion, the pinch rollers driven by the drive assembly.

12. An apparatus as claimed in claim 10 further comprising:

a heater mounted to the frame and positioned to heat at least one of the incoming first edge and the second edge.

13. An apparatus as claimed in claim 11 wherein the heater comprises:

a first gas nozzle mounted to the frame, the first nozzle arranged to direct hot gas towards the incoming first edge; and

a second gas nozzle mounted to the frame, the second nozzle arranged to direct hot gas towards the second edge.

14. An apparatus as claimed in claim 12 wherein the heater comprises:

a first radiator mounted to the frame, the first radiator arranged to radiate heat towards the incoming first edge; and

a second radiator mounted to the frame, the second radiator arranged to direct radiant heat towards the second edge.

15. An apparatus as claimed in claim 10 wherein the liquid remover comprises a third gas nozzle mounted to the frame, the third nozzle

arranged to direct gas towards the second edge at a circumferential position on the second edge, the circumferential position being on an arc between the liquid being carried by the conduit and a point at or near the zenith of the second edge,

wherein in use the third nozzle prevents liquid that has adhered to and ascended with the second edge from descending down towards the incoming first edge.

16. An apparatus as claimed in claim 10 wherein the liquid remover comprises a wiper mounted to the frame, the wiper engaging the second edge at a circumferential position on the second edge, the circumferential position being on an arc between the liquid being carried by the conduit and a point at or near the zenith of the second edge,

wherein in use the wiper prevents liquid that has adhered to and ascended with the second edge from descending down towards the incoming first edge.

17. An apparatus as claimed in claim 16 wherein the wiper comprises a rotating brush.

18. An apparatus as claimed in claim 10 wherein the liquid remover comprises a partial vacuum inducing assembly mounted at a circumferential position on the second edge, the circumferential position being on an arc between the liquid being carried by the conduit and a point at or near the zenith of the second edge.

19. An apparatus as claimed in claim 10 wherein the annular cage is substantially cylindrical in shape.

20. An apparatus as claimed in claim 10 wherein the crown portion comprises a lifting member liftable by a crane.

21. An apparatus for lining an underground conduit while the conduit is in service carrying a liquid, the apparatus comprising:

a cylindrical frame in use having a crown portion and a base portion;

a plurality of substantially parallel spaced apart rollers disposed around and supported by the cylindrical frame, the rollers forming a guide to guide a strip around a helical path when the machine is in use, the path having a zenith;

a pair of strip pinch rollers mounted to the frame at a position circumferentially about halfway between the crown portion and the base portion;

a primary drive assembly mounted to the frame and operably connected to the pinch rollers for driving the strip downwards into the helical path in a winding direction so as to present an incoming first edge to an adjacent second edge of a wound convolution of the strip;

a liquid remover mounted to the frame, the liquid remover arranged to prevent liquid that has adhered to and ascended with the second edge from descending down towards the incoming first edge; and

an extruder mounted to the frame, the extruder having a nozzle in use extruding a molten bead of plastic onto the strip at a position just before said overlap.

22. An apparatus as claimed in claim 21 further comprising a secondary drive assembly mounted to the frame, the secondary drive assembly providing additional driving torque to the primary drive assembly,

wherein the additional driving torque allows the pipe to be produced in longer lengths in situ.